

# ALTOS® Loose Tube, Gel-Free, All-Dielectric Cables with Binderless\* FastAccess® Technology 12 F, SMF-28® Ultra fiber, Single-mode (OS2)



**Part Number:**  
**012ZU4-T4F22D20**

Corning ALTOS® cable with Binderless\* FastAccess® technology is an all-dielectric gel-free cable designed for outdoor and limited indoor use for lashed aerial and duct installations. The innovative FastAccess technology feature combined with the gel-free binderless loose tube design simplifies removal of the cable jacket and accessing the buffer tubes. The loose tube design uses Corning SMF-28® Ultra fiber to provide reliable transmission parameters for a variety of voice, data, video and imaging applications. The cable is fully waterblocked using craft-friendly, water-swappable materials, which means no cleanup is required. The flexible buffer tubes are easy to route in closures, and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy midspan access. The all-dielectric gel-free cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to handle.

\*Corning's patented Binderless FastAccess Technology refers to the combination of a Corning FastAccess Technology jacket with an innovative technology used to bind cable construction through the manufacturing process, eliminating the use of binder yarns and waterblocking tapes.

## Features and Benefits

### Binderless\* FastAccess® Technology

Corning's Binderless FastAccess Technology refers to the combination of a Corning FastAccess Technology jacket with an innovative technology used to bind cable construction through the manufacturing process, eliminating the use of binder yarns and waterblocking tapes and resulting in a 25 percent improvement in cable access time. These technologies also reduce the overall risk of inadvertent fiber damage by reducing the need for sharp cable access tools.

### Binderless stranded optical core

Elimination of overlapping yarn binders around stranded tubes to reduce end access time

### Fully waterblocked loose tube, gel-free design

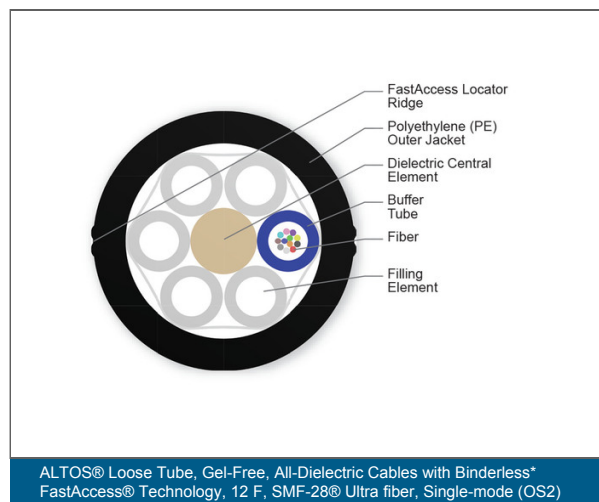
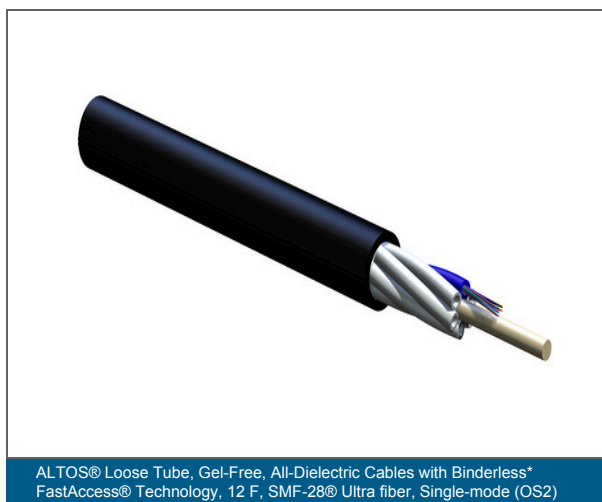
Simple access and no clean up

### Polyethylene jacket

Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

### Available with G.652.D and/or G.657.A1 fiber

Ready for any application



# ALTOS® Loose Tube, Gel-Free, All-Dielectric Cables with Binderless\* FastAccess® Technology 12 F, SMF-28® Ultra fiber, Single-mode (OS2)



## Specifications

General Specifications	
Environment	Outdoor
Cable Type	Loose Tube
Product Type	Dielectric
Fiber Category	Single-mode (OS2)
Application	Aerial, Duct
Fiber Count	12

Standards	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Common Installations	Outdoor lashed aerial and duct, indoor when installed according to National Electrical Code® (NEC®) Article 770
Design and Test Criteria	ANSI/ICEA S-87-640, Telcordia GR-20, RDUP PE-90

Environmental Conditions	
Temperature Range, Installation	-30 °C to -30 °C (-22 °F to -22 °F )
Temperature Range, Operation	-40 °C to 70 °C (-40 °F to 158 °F )
Temperature Range, Storage	-40 °C to -40 °C (-40 °F to -40 °F )
Notes	Corning recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Cable Design	
Central Element	Dielectric
Fiber Count	12
Buffer Tube Color Coding	Blue
Outer Jacket Color	Black

# ALTOS® Loose Tube, Gel-Free, All-Dielectric Cables with Binderless\* FastAccess® Technology 12 F, SMF-28® Ultra fiber, Single-mode (OS2)



Cable Design	
Outer Jacket Material	Polyethylene (PE)
Buffer Tube Color	Blue
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Active Tubes	1
Number of Filling Elements	5
Number of Tube Positions	6
Tape	Water-swellable
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
SAP Powder	Water-swellable

Mechanical Specifications	
Max. Tensile Strength, Long-Term	890 N (200.08 lbf)
Max. Tensile Strength, Short-Term	2700 N (606.98 lbf)
Min. Bend Radius Installation	153 mm (6.02 in)
Min. Bend Radius Operation	102 mm (4.02 in)
Nominal Outer Diameter	10.2 mm (0.4 in)

Optical Characteristics	
Fiber Code	Z
Fiber Name	SMF-28® Ultra fiber
Fiber Type	Single-mode
Performance Option Code	22
Maximum Attenuation	0.34 dB/km / 0.34 dB/km / 0.22 dB/km
Typical Attenuation	0.32 / 0.32 / 0.18
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Category	G.652.D/G.657.A1

# ALTOS® Loose Tube, Gel-Free, All-Dielectric Cables with Binderless\* FastAccess® Technology 12 F, SMF-28® Ultra fiber, Single-mode (OS2)



Ordering Information	
Product Number	012ZU4-T4F22D20
EAN Code	4056418344409
Weight	625 kg/km (419.98 lb/1000 ft)



Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC • 28216 • United States  
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • [www.corning.com/opcomm](http://www.corning.com/opcomm)

A complete listing of the trademarks of Corning Optical Communications is available at [www.corning.com/opcomm/trademarks](http://www.corning.com/opcomm/trademarks). All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2023 Corning Optical Communications. All rights reserved.